UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

May 7, 2021

Heather Turner
Chief General Counsel
Lyell Immunopharma, Inc.
400 East Jamie Court, Suite 301
South San Francisco, California 94080

Re: Lyell Immunopharma, Inc.
Draft Registration Statement on Form S-1
Submitted April 12, 2021
CIK No. 0001806952

Dear Ms. Turner:

We have reviewed your draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Draft Registration Statement on Form S-1 submitted April 12, 2021

Summary
Our Pipeline, page 2

1. We note that your pipeline table does not include clinical phases 1, 2 and 3, which the company's product candidates will be required to complete prior to commercialization. Please either revise your table to include all phases of development both preclinical and clinical, including appropriate arrows for each indication to demonstrate progress, or remove the graphic from pages 2, 73, 93 and 122.

Dilution, page 69

2. It appears that the pro forma net tangible book value was divided by 217,606,722 shares

rather than 23,132,291 shares to arrive at pro forma net tangible book value per share. Please revise or advise as to the appropriateness of your disclosure.

Critical Accounting Policies and Significant Judgments and Estimates
Common Stock Valuations, page 89

3. Once you have an estimated offering price or range, please explain to us how you determined the fair value of the common stock underlying your equity issuances and the reasons for any differences between the recent valuations of your common stock leading up to the initial public offering and the estimated offering price. This information will help facilitate our review of your accounting for equity issuances including stock compensation and beneficial conversion features. Please discuss with the staff how to submit your response.

Business
Our Preclinical Data, page 129

4. We note certain disclosure in the Business section regarding your preclinical data that may be read to imply efficacy, such as your statement on page 130 that your Epi-R T cell populations have "demonstrated superior expansion". Please revise this section to clarify, as you have done on pages 6 and 31, that such observations may not be repeated in clinical trials and to remove any implication that your product candidates are or will be found to be safe or effective, as these determinations are solely within the authority of the FDA and comparable foreign regulators.

Collaboration, License and Success Payment Agreements
Fred Hutch, page 138

5. Please revise your disclosure regarding the company's agreements with Fred Hutch to address the following:
   - describe in greater detail the nature and scope of intellectual property that the company was granted access to under the license agreement;
   - disclose the duration and termination provisions of the license agreement;
   - disclose the duration and termination provisions of the collaboration agreement; and
   - file the license and collaboration agreements as exhibits or explain why such filing is not required.

6. We note that in the letter agreement with Fred Hutch, the company is required to make success payments up to $200 million based on the fair market value of the series A convertible preferred stock or any security into which it has been converted. Please explain in this section whether the preferred stock converts automatically into common stock upon the closing of the underwritten public offering and if it would be on a one-for-one basis. Also revise accordingly the similar provision and disclosure under the letter agreement with Stanford.

GSK Collaboration and License Agreement, page 141

7. For applications of your Epi-R technology to the NY-ESO-1 TCR, and in regards to the company and GSK sharing responsibilities of development activities, please disclose if each is responsible for the costs associated with their responsibilities.

National Cancer Institute (NCI) License Agreement, page 142

8. Please file the license agreement with NCI as an exhibit or advise us why such agreement is not required to be filed. See Item 601(b)(10) of Regulation S-K.

Intellectual Property, page 143

9. Please revise your intellectual property disclosure to clearly describe on an individual or patent family basis the type of patent protection granted for each product, the expiration year of each patent held, and the jurisdiction of each patent. Please clearly distinguish between owned patents and patents in-licensed or out-licensed to third parties. In this regard it may be useful to provide tabular disclosure.

Legal Proceedings, page 165

10. We note your statement on page 165 that the pending arbitration proceedings between Lyell and PACT Pharma are not material to your operations; however, we also note the disclosure provided on page F-21 which quantifies the impact of the PACT Agreement. Please provide an analysis supporting your conclusion that the pending matter is not material. Alternatively, revise your disclosure to describe the factual basis alleged to underlie the proceedings along with the relief sought, and provide any updates to the status of the arbitration. See Item 103 of Regulation S-K for guidance.

Certain Relationships and Related Person Transactions, page 192

11. For each of the transactions, please disclose the name of the related person and the basis on which the person is a related person, the related person's interest in the transaction, and the approximate dollar value of the amount involved in the transaction. See Item 404 of Regulation S-K.

Report of Independent Registered Public Accounting Firm, page F-2

12. Please have your auditors amend their audit report to indicate that their audit was conducted in accordance with the standards of the PCAOB, rather than only the auditing standards. Refer to the guidance in paragraph .09 of AS 3101.

General

13. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or

not they retain copies of the communications.

You may contact Jenn Do at 202-551-3743 or Vanessa Robertson at 202-551-3649 if you have questions regarding comments on the financial statements and related matters. Please contact Samuel Kluck at 202-551-3233 or Laura Crotty at 202-551-7614 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Dave Peinsipp